

September 17, 2015

Scott Mathias
Associate Director
Air Quality Policy Division
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Re: Air Dispersion Modeling of Michigan Sulfur Dioxide Pollution

Dear Associate Director Mathias,

Sierra Club urges the U.S. Environmental Protection Agency to designate the areas surrounding the St. Clair, Belle River, and Monroe coal-fired power plants as nonattainment under the sulfur dioxide ("SO₂") National Ambient Air Quality Standard ("NAAQS"). Air dispersion modeling recently conducted by Wingra Engineering, S.C. on behalf of Sierra Club demonstrates that ambient air concentrations in these areas exceed the NAAQS, which is the maximum concentration of air pollution allowed to protect public health.

First, air dispersion modeling demonstrates that SO₂ emissions from the St. Clair in Michigan have caused downwind SO₂ ambient air concentrations to exceed the 196.2 micrograms per cubic meter NAAQS. In particular, the modeling of actual emissions from this facility alone shows peak concentrations as high as 262.4 micrograms per cubic meter. When the actual emissions from the Belle River power plant, which is another source of SO₂ that is located within 50 kilometers of the St. Clair power plant, are included the peak concentration is as high as 270.2 micrograms per cubic meter. Accordingly, the U.S. Environmental Protection Agency should designate the area surrounding the St. Clair coal-fired power plant, including the area where Belle River is located, as nonattainment under the NAAQS.

Second, air dispersion modeling demonstrates that SO₂ emissions from the Monroe power plant alone exceed the NAAQS with peak concentrations as high as 283.9 micrograms per cubic meter. When the actual emissions from numerous others sources of SO₂ that are located within 50 kilometers of the Monroe power plant, are included, the peak concentration is as high as 292.5

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micrograms per cubic meter. Accordingly, the U.S. Environmental Protection Agency should designate the area surrounding the Monroe coal-fired power plant as nonattainment under the NAAQS.

Enclosed, please find the results of the modeling analyses, along with the corresponding modeling input and output files.

Sierra Club urges the U.S. Environmental Protection Agency to consider this information as it undertakes area designations in Michigan for the 2010 revised primary SO₂ NAAQS. This information is being provided to both EPA Region 5 and to appropriate personnel at the Michigan Department of Environmental Quality. In the meantime, please let us know if we can provide any additional information.

Thank you for your attention to and consideration of this matter, and please do not hesitate to contact us if you would like to discuss further.

Sincerely,

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